

REMARKS/ARGUMENTS

These remarks are in response to the Office Action dated July 27, 2005. Claims 1-34 are pending in the present application.

Claim Rejections

In the Office Action, the Examiner rejected claims 1-34 under 35 U.S.C. §102(e) as being anticipated by Chung et al. (U.S. Patent No. 6,470,389). In rejecting independent claims 1, 13 and 25, the Examiner stated:

a. As per claims 1 and 13, Chung et al a method for hosting a network device on a cluster of servers. Furthermore, Chung et al teaches a method for connecting a client to a database managed by a network of computer systems, the method comprising the steps of: a) providing a shared network address for the plurality of DBMS members (See col. 4, lines 19-25, a network service is hosted by a server cluster in which each server includes a primary address and as secondary IP address. A common cluster address is assigned as the secondary IP address for each of the server); and b) utilizing the shared network address by the client to connect to an active member of the plurality of members (See col. 4, lines 30-36, The router receives client requests form the Internet, and uses a dispatching technique to direct client requests having the cluster address as a destination).

b. As per claim 25, Chung et al teaches a system for connecting a client to a database managed by a network of computer systems, the network including a plurality of database management system (DBMS) members, the system comprising: a shared network address for the plurality of DBMS members (See col. 4, lines 19-25, a network service is hosted by a server cluster in which each server includes a primary address and as secondary IP address. A common cluster address is assigned as the secondary IP address for each of the server); and a network router coupled to the client for utilizing the shared network address to connect to an active member of the plurality of members (See col. 4, lines 30-36, The router receives client requests form the Internet, and uses a dispatching technique to direct client requests having the cluster address as a destination).

Independent Claims 1, 13 and 25

Applicants respectfully submit that Chung fails to teach or suggest the cooperation of elements recited in claims 1, 13 and 25. In particular Chung fails to teach or suggest a database

managed by a network of computer systems, wherein the network includes a plurality of database management system (DBMS) members, providing a shared network address for the plurality of DBMS members, and utilizing the shared network address to connect to an active DBMS member, as recited in claims 1, 13, and 25.

Chung is directed to hosting a network service on a cluster of servers. Each server is assigned a cluster address, which is common to each server, and a primary address, which is unique to the server. In Chung, requests for the network service from a client are directed to the cluster address. The requests are received by a dispatcher at the cluster and then routed to one of the servers of the cluster. (Abstract; column 4, lines 19-37).

Applicants respectfully submit that Chung is not directed to, and makes no mention of, a database managed by a network of computer systems, wherein the network includes a plurality of database management system (DBMS) members, as recited in claims 1, 13 and 25. In the present invention, the network of computer systems form a sysplex environment (FIG. 2, item 200; Specification, page 6, line 18-21). On each computer system 201-203 resides a DBMS member 221-223, which manages a pool of data 210 stored in a plurality of disk drives 211-213. While the DBMS member 221-223 resides on a computer system 201-203, it is important to note that a particular DBMS member, e.g., 221, is not necessarily *associated with* the computer system 201. For instance, if the computer 201 fails, the DBMS member 221 can be restarted on another computer system, e.g., 202. (Specification, page 9, line 21 to page 10, line 4).

According to the preferred embodiment, and in contrast to Chung, a shared network address is provided for the plurality of DBMS members and *not* for the computer systems in the network. (Specification, page 7, lines 10-12). Accordingly, the DBMS members, and not the computers in which they reside, are linked by the shared network address.

As stated above, nothing in Chung mentions or suggests a database and a plurality of DBMS members that manage the database. In Chung, the cluster of computer systems, e.g., servers, host a network service. The *servers* share the common network address (column 4, lines 19-21). In Chung, the client uses the common network address to connect to any one of the *servers* in the cluster. In the present invention, the client uses the shared network address to connect to an active DBMS member, regardless of which computer system it may reside.

To illustrate this important distinction, an analogy to post addresses can be used. A person who lives in a house can rent a post office box. The post office box number is associated with the person, not the house. The house is associated with a street address. Chung's common cluster address is analogous to the house's street address, and the present invention's shared network address is analogous to the person's post office box number. The post office box number and the street address are distinct.

Applicants respectfully submit that Chung fails to teach or suggest a database managed by a network of computer systems, wherein the network includes a plurality of database management system (DBMS) members, providing a shared network address for the plurality of DBMS members, and utilizing the shared network address to connect to an active DBMS member, as recited in claims 1, 13, and 25. Accordingly, claims 1, 13 and 25 are allowable over Chung. Claims 2-12, 14-24, and 26-34 depend from claims 1, 13 and 25 respectively. Thus, claims 2-12, 14-24, and 26-34 are also allowable over Chung.

Dependent Claims 8, 20 and 30

Applicants respectfully submit that claims 8, 20 and 30 are allowable over Chung because they depend from claims 1, 13 and 25, respectively, and because Chung fails to teach or suggest transmitting to the client a list of active DBMS members from an active DBMS member. In the present invention, once the client establishes a connection with the active DBMS member

utilizing the shared network address, the active DBMS member returns to the client a list of the other active DBMS members in the sysplex. (Specification, page 8, lines 6-8).

In the Office Action, the Examiner states that Chung teaches this feature at column 10, lines 37-67. That section, however, discusses load balancing and failure handling capabilities. In that section, Chung describes how the dispatch function selects which server to service the request from the client and how a watchdog daemon monitors for server failure and masks the failure by rebalancing the load. The client is blind to all of these functions. Nothing in the cited portion or elsewhere in Chung teaches or suggests transmitting to the client a list of active DBMS members from an active DBMS member, as recited in claims 8, 20 and 30. Accordingly, claims 8, 20 and 30 are allowable over Chung.

Dependent Claims 12, 24 and 34

Applicants respectfully submit that claims 12, 24 and 34 are allowable over Chung because they depend from claims 1, 13 and 25, respectively, and because Chung fails to teach or suggest utilizing the member-specific network address of a DBMS member to re-establish a connection to the DBMS member for performing a resynchronization process after a first connection to the DBMS member has been interrupted. In the present invention, if the connection between the client and the DBMS member is disrupted in the middle of a database request, the client must reconnect with the same DBMS member in order to resynchronize. (Specification, page 9, line 11-20). To do this, the client uses the member-specific network address of the DBMS member. In this manner, the client can reconnect to this particular DBMS member regardless of which computer system it may be residing at the moment.

In the Office Action, the Examiner states that Chung teaches this feature at column 10, lines 37-67. As stated above, this section discusses load balancing and failure handling capabilities. In that section, Chung describes how a watchdog daemon monitors for server failure

and masks the failure by rebalancing the load. Thus, in Chung, a request that is interrupted by a server failure is merely transferred to another server that is online. Nothing in the cited portion or elsewhere in Chung teaches or suggests utilizing the member-specific network address of a DBMS member to re-establish a connection to the DBMS member for performing a resynchronization process after a first connection to the DBMS member has been interrupted, as recited in claims 12, 24 and 34. Accordingly, Applicants respectfully submit that claims 12, 24 and 34 are allowable over Chung.

Conclusion

In view of the foregoing, Applicants submit that claims 1-34 are allowable over the cited reference. Applicants respectfully request reconsideration and allowance of the claims as now presented.

Applicants' attorney believes that this application is in condition for allowance. Should any unresolved issues remain, Examiner is invited to call Applicant's attorney at the telephone number indicated below.

Respectfully submitted,
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Date

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